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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/242,191	05/17/1999	MICHEL RIERA	144-198	9738

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DRINKER BIDDLE & REATH
ATTN: INTELLECTUAL PROPERTY GROUP
ONE LOGAN SQUARE
18TH AND CHERRY STREETS
PHILADELPHIA, PA 19103-6996

EXAMINER

TRAN, THAO T

ART UNIT PAPER NUMBER

1711

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/242,191

Applicant(s)

RIERA, MICHEL

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19,21-26,28-31 and 34-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19,21-26,28-31 and 34-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/05/2005 has been entered.
2. Claims 19, 21-26, 28-31, 34-42 are currently pending in this application. Claims 20, 27, and 32-33 have been canceled. Claims 39-42 have been newly added. Claims 19, 21-26, 29, 34-35, 37-38 have been amended.

Specification

3. The disclosure is objected to because
4. The disclosure is also objected to because the specification is replete with incomprehensible expressions. The following is only an example: "If the peripheral electrons of the molecule are excited by a magnetic field moving rapidly relative to the fuel, they change to higher energy states, i.e. are on a higher orbital in accordance with Schrodinger's theory, causing stereochemical deformation of the molecules. The molecules changes to a higher energy state in the linearly developed form, thereby offering the maximum of reactive sites". If Applicants mean to indicate that the valence electrons, excited by the magnetic energy, move to a higher energy level in accordance with the Schrodinger's theory, causing a stereochemical change in the

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molecule, please state so. With respect to the use of “peripheral electrons”, if Applicants mean to indicate these as valence electrons or electrons in the outermost shell, please state so.

Applicants are required to correct all obscure expressions, including the ones above, and make them scientifically clear and comprehensible.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 19, 21-26, 28-31, and 35 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 19 and 35 contain the newly added limitations, “an angle greater than 0° and less than 180° ” and “where $0^{\circ} < \phi < 180^{\circ}$ ” respectively, that are new matter because they have no proper support in the specification as originally presented. The specification discloses an angle being variable between a minimum value obtained when the coils are in contact and a maximum value of 180° less the minimum angle imposed by the dimensions of the coils (see page 8). As shown in Figures 1 and 6, the minimum angle when the coils are in contact is not 0° .

Claims 19, 22, and 23 further contain the newly added limitation, “time-varying currents” that has no proper support in the specification as originally presented.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 19, 21-26, 28-31, 34-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Heyden et al. (US Pat. 3,551,794).

Heyden teaches a method for generating a magnetic field to act on a fluid moving through a conduit, the method comprising the use of a pair of coils (12, 18) or permanent magnets for generating a first magnetic field and a pair of coils (20, 26 or 22, 24) with a ferromagnetic core to generate a second magnetic field; wherein the magnitude and direction of the resultant magnetic field is varied over time, forming varying angles with the direction of the flow of the liquid. Heyden further teaches a sinusoidal electrical current (time-varying current) is applied to the coils, shifted in 90° phase (II/2) and the amplitude and frequency can be kept constant or varied. (See Figs. 1-4, 6-10; col. 5-10).

With respect to the preamble limitation, since Heyden teaches the same steps in the process, what Heyden teaches would inherently be able to perform the same functions and intended purpose as presently claimed.

Response to Arguments

9. Applicant's arguments filed 12/05/2005 have been fully considered but they are not persuasive.

Applicants contend that Vander Heyden differs from the presently claimed invention because the reference does not teach a method of creating stereochemical deformations or of producing a magnetic field capable of creating such deformations. However, since the reference teaches the same steps of generating magnetic fields with varying amplitude, the method disclosed by Vander Heyden would inherently have the same effects as presently claimed. Moreover, it has been known within the skill in the art that in the presence of an external magnetic field, the electrons of a molecule circulate about the direction of the applied magnetic field, causing a small magnetic field at the nucleus that opposes the external magnetic field. This, in turn, causes an electron density shift around each nucleus in a molecule according to the types of nuclei and bonds in the molecule, making the electron density uneven around each nucleus. Thus, an external magnetic field can cause a stereochemical change in the molecule by shifting the electron density in the molecule. Hence, Vander Heyden anticipates the presently claimed invention.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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March 31, 2006

THAO T. TRAN
PATENT EXAMINER